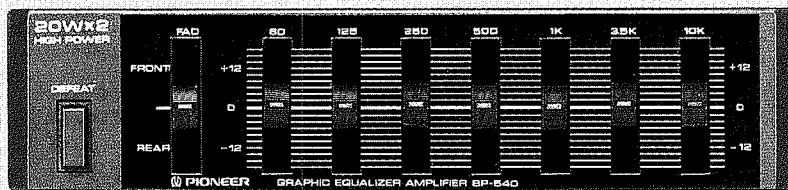


GRAPHIC EQUALIZER/
AMPLIFIER

OWNER'S MANUAL

Thank you for purchasing this PIONEER product. Before attempting operation, be sure to read this manual.



 **PIONEER**®

BP-540

Features

2-Way High-Power System

Either 4-speaker or 2-speaker, 2-way high-power system can be selected. When using the 4-speaker system, front and rear volume can be adjusted with the fader control to produce concert hall presence. Also, the BPTL method gives powerful force to the 20W + 20W output of the 2-speaker high-power system.

7 Band Level Control

Level can be adjusted at each of the following frequencies: 60Hz, 125Hz, 250Hz, 500Hz, 1kHz, 3.5kHz and 10kHz to obtain high quality sound not possible with an ordinary tone control. Thus, you can adjust the system output to match your car's acoustic characteristics.

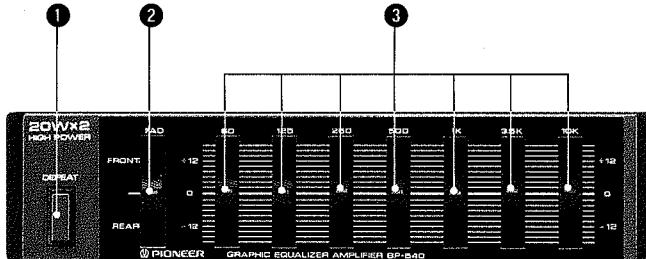
A Three Input Selector

This unit is equipped with a three input selector so that you can select from among the booster-compo and pin jack inputs according to your car stereo system.

Important

The serial number of this device is located on the bottom of the unit. For your own security and convenience, be sure to record this number on the enclosed warranty card.

Nomenclature and Use



① Equalizer Switch (DEFEAT)

Press to activate the equalizer control function and illuminate the indicator on the equalizer control lever.

② Fader Control

Raising the lever gradually decreases the volume of the rear speakers, while lowering it gradually decreases the volume of the front speakers. Adjust the volume of the front and rear speakers.

- The fader control functions only in a 4-speaker system. The indicator of the switch lights while the fader control is functioning.

③ Equalizer Control

Slides up and down to allow adjustment to suit both the music and individual tastes. Pressing the equalizer switch causes each indicator to illuminate.

Connecting the Units

Connect the components correctly as shown in the diagram.

- Test-connect all components before securing them into place. Test-operate your entire car stereo system to ensure that there are no faulty wiring connections between this unit and the rest of your car stereo system.
- Be sure to connect only a single component as shown in the connection diagram. If two or more components are connected, internal circuitry may be damaged or an accident may occur.
- When using this unit in combination with a car stereo equipped with pin jacks, see the section entitled "When combined with a car stereo with pin jacks".
- For detailed information concerning connections between different components and this unit consult their respective instruction manuals and follow those recommendations precisely.
- Be sure not to remove the cap on the red lead (female plug) of this unit when not in use to prevent shorting.
- Wire all connecting cords so that they stay well clear of high-temperature areas such as the heater exhaust port.
- To ensure that all components used in combination with this unit operate properly, be sure to wire the main power supply cable (red) correctly to the respectively determined points. Failure to do so or errors in this process will result in total inoperation.
- Be sure to properly connect the color coded leads. Failure to do so can cause malfunctions.

Before Connection

Set each selector in the proper position. Note that setting a selector in the wrong position may damage the unit.

Input Selector (Fig. 1)

COMPO: When connecting the unit with a component car stereo.

BOOSTER: When connecting the unit with a regular car stereo.

PIN JACK: When connecting the unit with a car stereo with pin jacks.

Speaker Mode Selector (Fig. 2)

4SP: When the unit is used in a 4-speaker system.

2SP: When the unit is used in a 2-speaker high-power system.

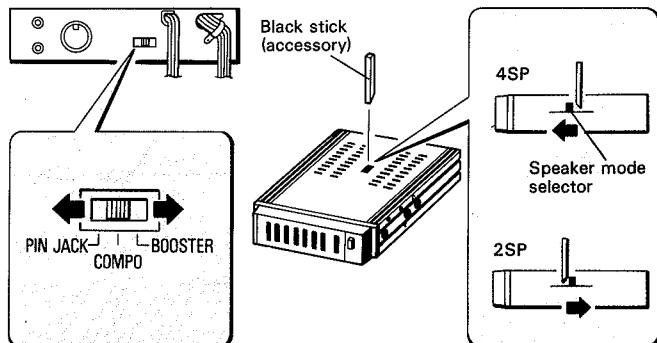
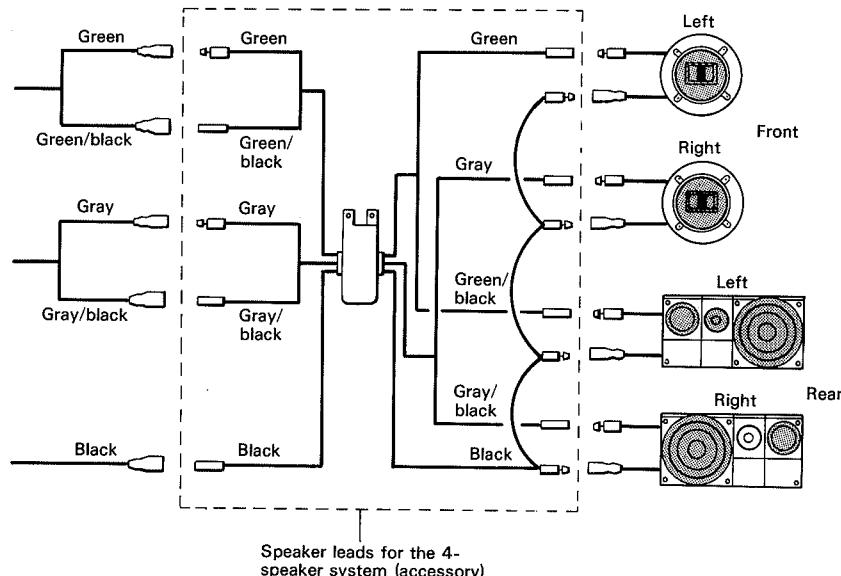


Fig. 1

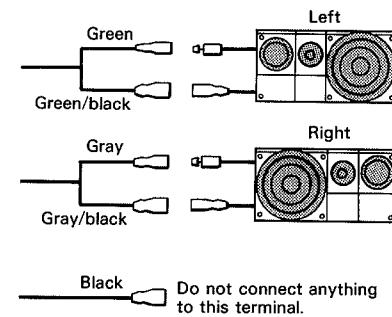
Fig. 2

Connecting the Speakers

4-Speaker System



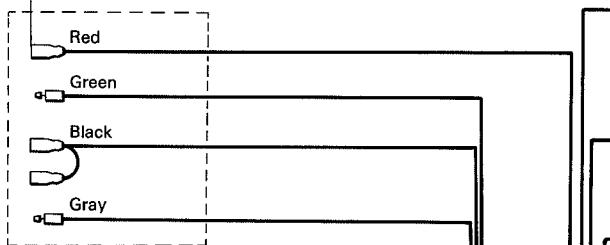
2-Speaker High-Power System



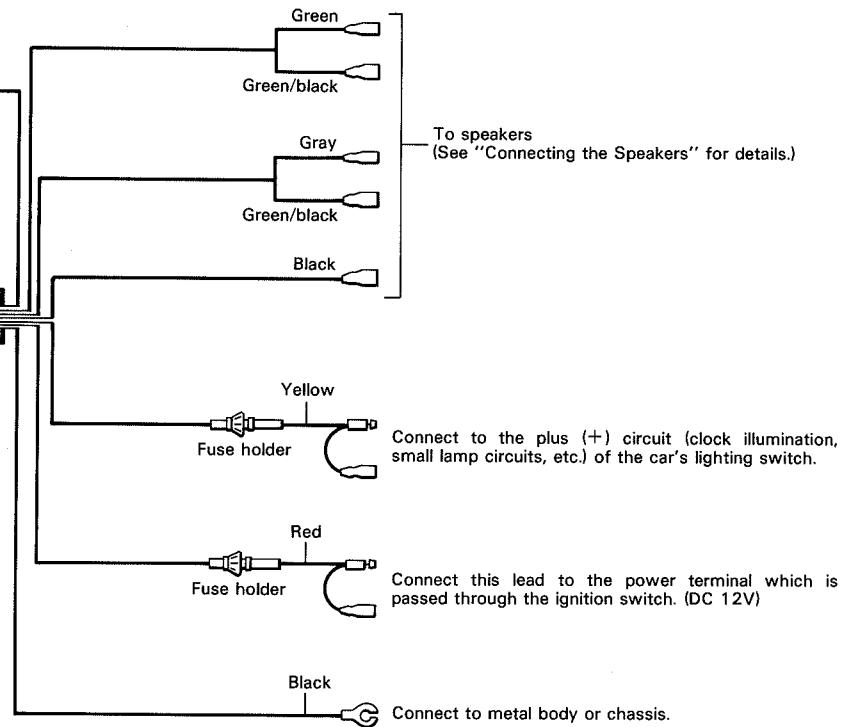
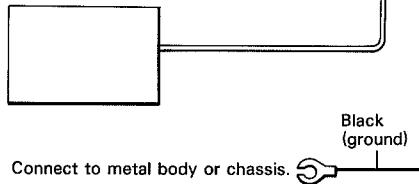
- Speakers connected to this unit must be high power type with over 20W maximum input power and have impedance between 4 and 8 ohms. Be aware of the fact that using a speaker other than the one specified can cause the speaker to be damaged.
- A special BPTL circuit is used to be sure that you do not connect the speaker directly to ground nor join the left and right speaker (–) leads.

When Combined with a Component Car Stereo

Be sure not to remove the cap.

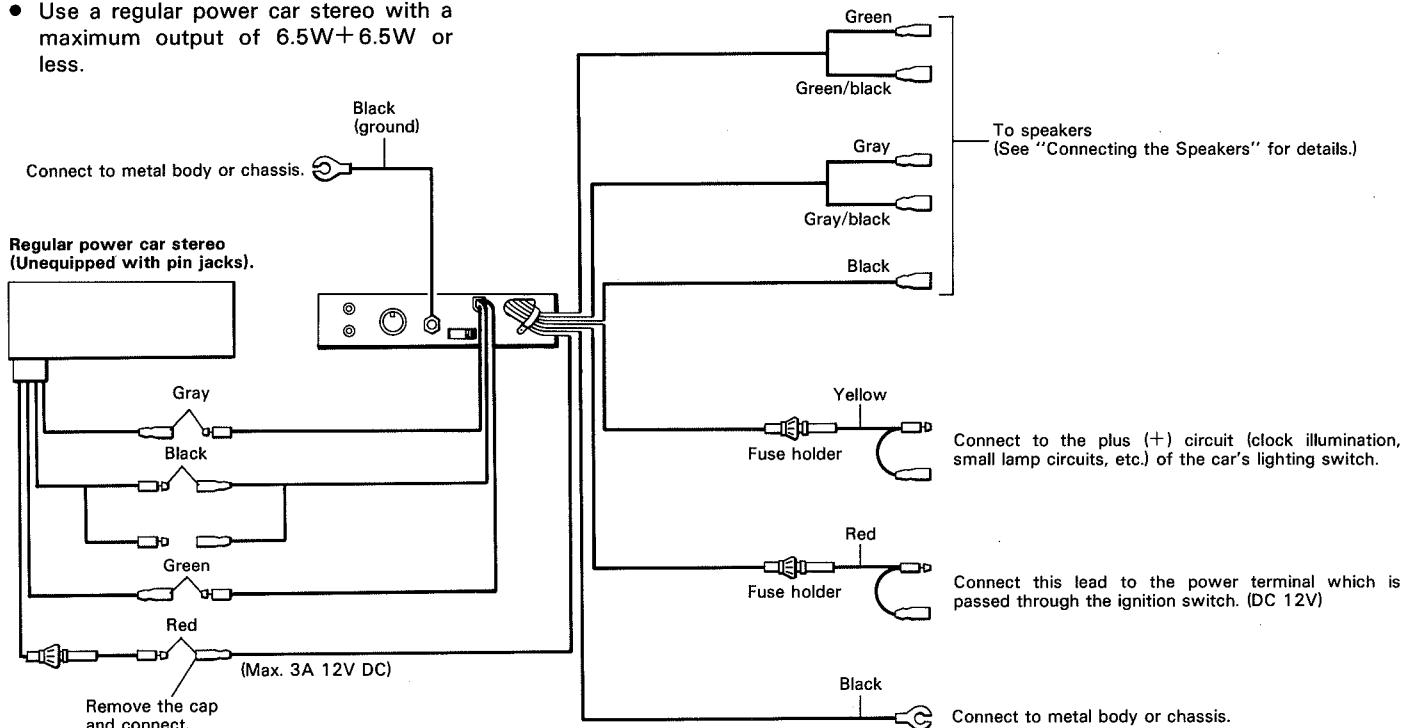


Component car stereo cassette deck



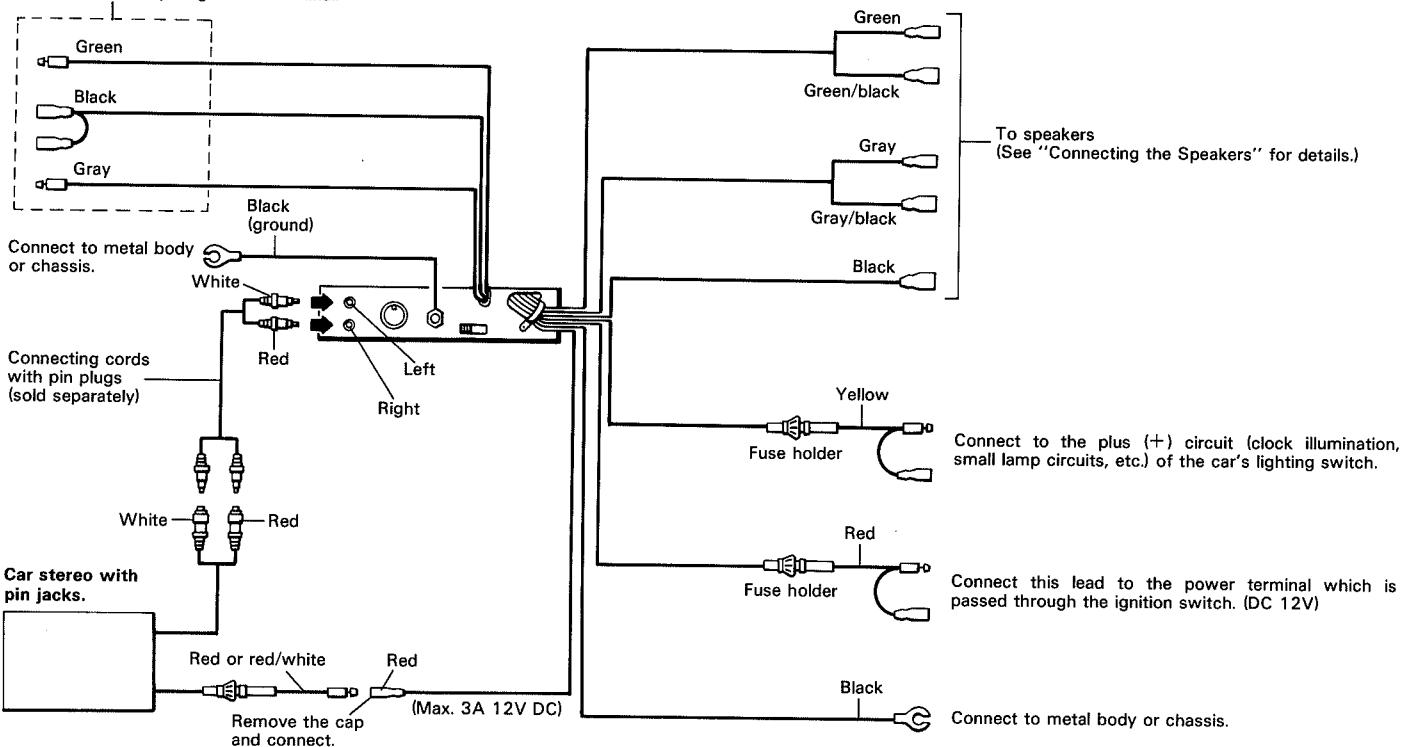
When Combined with a Regular Car Stereo

- Use a regular power car stereo with a maximum output of 6.5W+6.5W or less.



When Combined with a Car Stereo with Pin Jacks

Do not connect anything to this terminal.



Installation

- Be sure to use the parts supplied and install the unit securely. If parts other than those supplied (specified) are used, they may loosen or cause damage internal parts.
- Be sure to install the unit in places where the driver is not bothered and where there is no danger of passengers being injured in case of sudden stops.
- Be sure to consult your dealer before making any holes in the car.

Installation Cautions

This unit features a built-in high-power amplifier, so when installed in a stacked configuration with a separately sold car stereo, be sure to always position this unit on the top. When this unit is installed below a car stereo, the heat generated can cause damage to cassette tapes.

Example Installation



Before Installation

- First, be sure you have the tools you will need. (Fig. 1)
- To prevent shorts, be sure to disconnect the negative battery terminal. (Fig. 2)

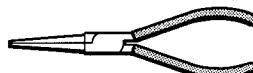
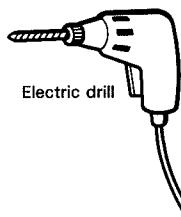
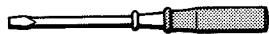
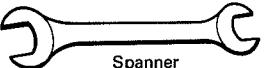
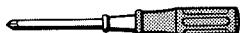


Fig. 1

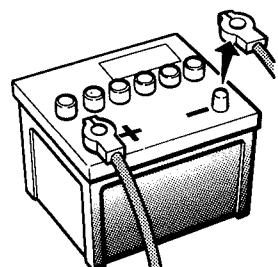


Fig. 2

Installation below the Dashboard

1. After deciding on the installation location, use a felt pen to mark the places where holes are to be made. (Fig. 1)
2. Use an electric drill to drill 3 or 4 holes near the marked places where holes are to be made. (Fig. 2)
3. Stay mounting screw installation. (Fig. 3)

4. Install the mounting angle and strap on the dashboard. (Fig. 4)
5. Install the ground lead and this unit. (Fig. 5)
6. When you finish the installation, be sure to make one more check to be sure everything is done correctly. Reinstall all car parts that were removed. Reconnect the minus battery cable.

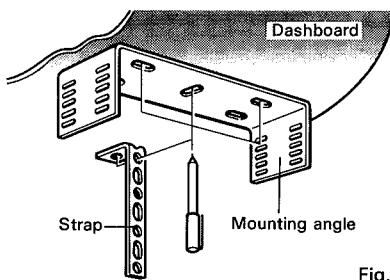


Fig. 1

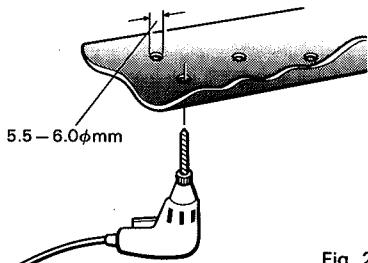


Fig. 2

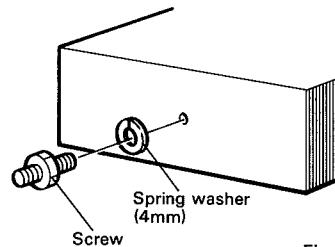


Fig. 3

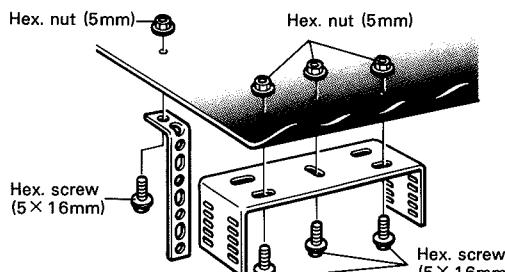


Fig. 4

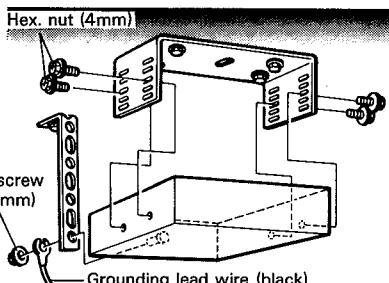
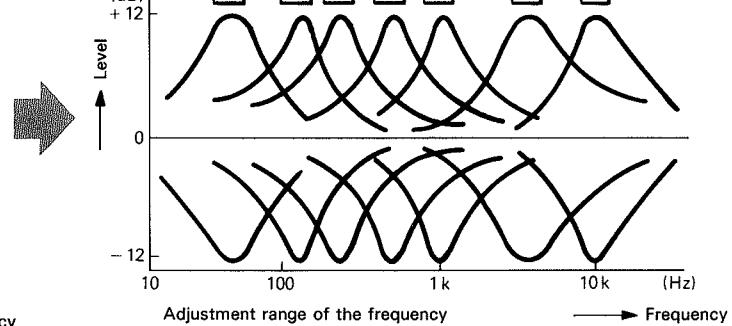
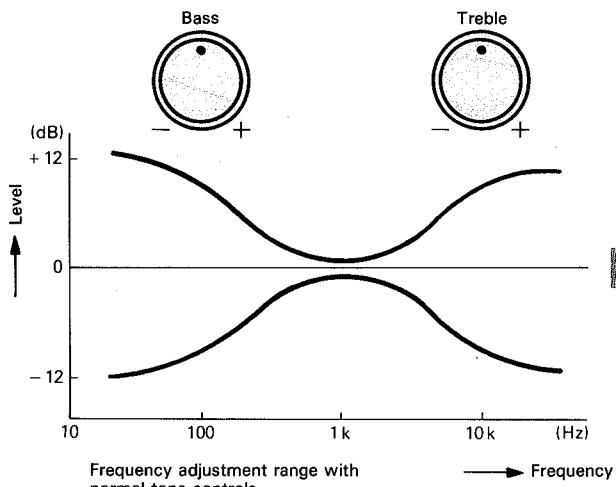


Fig. 5

Frequency Adjustment Range with the Graphic Equalizer

Since each frequency level of the graphic equalizer can be increased or decreased, fine control of the sound is possible.



Precautions

- To assure proper operation of the unit, keep the vehicle interior temperature within a normal range by using the vehicle's airconditioner or heater.
- Enough care must be taken against battery overdischarge caused by long operation of the set at a high sound level when the engine is not running or is idling.
- Replace fuses only with the types stipulated on the fuse holder.
- Dust the heat sinks occasionally so that they will not become clogged.

In case of trouble

When the unit does not operate properly, contact your dealer or the nearest authorized PIONEER Service Station.

Specifications

Power source	14.4V DC (10.8 – 15.6V allowable)
Grounding system	Negative type
Max. current consumption	4A
Dimensions	150(W) × 35(H) × 163(D)mm [5-3/8(W) × 1-3/8(H) × 6-3/8(D)in.]
Weight	0.9kg (2.0lbs.)
Continuous power output (2 speaker)	12W per channel min. into 4 ohms, both channels driven 50 to 15,000Hz with no more than 5% THD.
Continuous power output (4 speaker)	3.2W per channel min. into 4 ohms, both channels driven 50 to 15,000Hz with no more than 5% THD.
Maximum power output (2 speaker)	20W × 2
(4 speaker)	6.5W × 4
Load impedance (2 speaker)	4Ω (4 – 8Ω allowable)
(4 speaker)	4Ω (2 – 8Ω allowable)
Frequency response	20 – 30,000Hz (±3dB)
Signal-to-noise ratio	90dB (IHF-A network, at 1W)
Distortion	0.5% (at 1.5W, 1kHz)
Input level	COMPO: 70mV/22kΩ LINE IN: 200mV/15kΩ BOOSTER: 3V/120Ω
Equalization frequency	60Hz, 125Hz, 250Hz, 500Hz, 1kHz, 3.5kHz, 10kHz
Gain	0dB
Equalization range	±11dB

These specifications were determined and are presented in accordance with specification standards established by the Ad Hoc Committee of Car Stereo Manufacturers.

Note:

Specifications and the design are subject to possible modification without notice due to improvements.

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